Clinoptilolite Zeolite - Information and Frequently Asked Questions

Upcoming MCPS artificial turf projects will feature an organic infill material named *clinoptilolite* **zeolite**, a mineral which comes from rock sourced in Nevada. Clinoptilolite zeolite, also referred to as Zeofill, has been used on many artificial turf fields around the country and is the same organic infill used for three newly installed fields at the Maryland SoccerPlex in Montgomery County, which opened in March 2018.

Following are some frequently asked questions and answers regarding clinoptilolite zeolite.

Is Clinoptilolite Zeolite safe?

Yes. Clinoptilolite meets multiple safety standards. Metal levels in clinoptilolite, for example, are well below the standard for children's toys based on the European Standard, arguably the most stringent standard in the world for child safety. The Material Safety Data Sheet (MSDS) for clinoptilolite zeolite is available here.

Why did MCPS choose clinoptilolite zeolite as the infill for upcoming artificial turf projects?

Clinoptilolite zeolite is a preferred infill for multiple reasons including the following:

- It is a safe, organic product that serves as an alternative to crumb rubber
- It mitigates the heat effects of artificial turf, as it is light-colored and porous
- It absorbs and holds water, facilitating drainage and cooling the field through subsequent evaporation
- Following the initial months after installation, the infill becomes embedded into the fibers
 of the field, minimizing the "splash" of infill and providing increased playability
- Clinoptilolite is maintenance-friendly, including that it does not need to be watered
- Our artificial turf field system includes a top-of-the-line shock pad and creates a safe, state-of-the-art playing surface for MCPS student-athletes and community users

Is this infill already being used in Montgomery County?

Yes. Clinoptilolite zeolite is the featured infill in the three newly installed artificial turf fields at the Maryland SoccerPlex in Montgomery County. More information about the fields at the SoccerPlex can be found here.

Clinoptilolite zeolite is also being used around the country. Venues such as the StubHub Center, home to the Los Angeles Galaxy Soccer Organization, and the City of Los Angeles Department of Recreation and Parks are using this infill to achieve a safer, more durable, cooler, and more consistent playing performance than previous materials.

What about erionite zeolite? Will this product be incorporated into the infill?

Erionite zeolite will NOT be used and is not a component of the infill that will be used for MCPS artificial turf fields. There are multiple reports expressing concerns with erionite, which is why this product will not be used in any capacity on our fields. It is important to establish the distinction between erionite and clinoptilolite zeolite – they are two completely different products.

How does this material relate to County Council Resolution #18-58 regarding plant-based infill materials?

While clinoptilolite zeolite is not plant-based, it is a naturally occurring material. When the County Council adopted Resolution #18-58, it was largely concerned with the possible risks associated with synthetic infill materials, such as crumb rubber. As a result, the majority of Councilmembers agree that, as a naturally occurring mineral that does not contain any synthetic elements, clinoptilolite zeolite meets the intent of Council Resolution #18-58. Following are links to correspondence between MCPS and the County Council regarding Resolution #18-58.

<u>Letter from MCPS to the Montgomery County Council</u>

Letter from Hans Riemer, County Council President, to MCPS